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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/832,211	04/10/2001	Marjorie B. Medina	0164.98	1182

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BELTSVILLE, MD 20705-5131

EXAMINER

CARRILLO, BIBI SHARIDAN

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 01/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/832,211

Applicant(s)

MEDINA, MARJORIE B.

Examiner

Sharidan Carrillo

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \*   c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 04.                      6) ☐ Other:

*Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, and 4-12 are indefinite because it includes the trademark "TWEEN". The trademark cannot be used because the composition covered by this trademark is solely within the control of the trademark owner and maybe subject to change over time at the sole discretion of the owner. The use of the trademark TWEEN has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claims 1 and 4-12 are further indefinite because it is unclear what one of ordinary skill in the art would consider as an "effective amount". Additionally, it is unclear whether the term "heparan" should be amended to "heparin".

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claims 1, 5, 7, 9-10, and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Doyle et al. (US2002/0009436A1).

Doyle et al. teach a composition for inhibiting the adhesion or reducing the binding of the microorganism to animals such as poultry and cows, wherein the composition comprises carrageenan, carboxymethyl cellulose, or arginine (paragraphs 23, col.3-col.4 bridging, paragraphs 40, 89, and 135). The limitations of detaching microorganisms from the animal would inherently be met since Doyle et al. teach using the composition to decrease the binding interaction between the microorganism and the cell, such that a reduction in the binding interaction between the microbe and the cell inherently results in the detachment of the microorganism from the cell, tissue, or substrate.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1746

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 2-4, 6, 8, and 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Doyle et al. (US2002/0009436A1).

Doyle et al. teach using carrageenan to promote the reduction in the adhesion of the microorganism to the animal. In reference to claims 2-3, Doyle et al. fail to specifically teach the claimed species of carrageenan. However, it would have been within the level of the skilled artisan to have modified the method of Doyle et al. to include species of carrageenan since Doyle et al. teach that carrageenan is used to promote the inhibition of the microorganism.

In reference to claims 4, 6, 8, and 11, Doyle et al. fail to teach contacting the animal or poultry twice with the composition. However, it would have been within the level of the skilled artisan to apply the composition to the animal depending upon the microbial population present, such that the composition is applied until the microorganisms are inhibited from binding to the cell, tissue or surface of the substrate.

8. Claims 1, 4-6, and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michener et al. (2934438).

Art Unit: 1746

Michener et al. teach a method of preserving foodstuffs using a composition comprising guanidines with a suitable carrier such as methyl cellulose (col. 4, lines 19-20). In col. 4, lines 5-10, Michener et al. teach that the method can be applied to meats, fish, and slaughter house wastes (col. 4, line 45). Michener et al. do not specifically teach inhibiting microbial attachment. However, the method of Michener et al. is used for the preservation of foodstuffs which are normally subject to microbial spoilage. It would have been within the level of the skilled artisan to have applied the method of Michener et al. to the inhibition of microbial attachment since Michener et al. teach using the composition for the preservation of meats and such a process would require no microbial attachment to occur.

In reference to claims 4, 6, 8, and 11, Michener et al. fail to teach contacting the animal or poultry twice with the composition. However, it would have been within the level of the skilled artisan to apply the composition to the meat as needed in order to prevent microbial reinfection of the meat and to further maintain long-term preservation of the meat.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Argoudelis teaches treating microbial infections with guanidine and methylcellulose. Barbachyn et al. teach treating microbial infections with arginine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharidan Carrillo whose telephone number is 703-308-1876. The examiner can normally be reached on Monday-Friday, 6:00a.m-2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on 703-308-4333. The fax phone numbers for

Application/Control Number: 09/832,211

Page 6


Art Unit: 1746

the organization where this application or proceeding is assigned are 703-305-7719 for regular communications and 703-305-7719 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Sharidan Carrillo  
Primary Examiner  
Art Unit 1746

bsc  
December 21, 2002

  
SHARIDAN CARRILLO  
PRIMARY EXAMINER